

CLAIMS

[1] An exhaust gas purifying apparatus for an internal combustion engine having:

NOx removing means provided in an exhaust system of said engine, for adsorbing NOx in exhaust gases from said engine when exhaust gases are in an oxidizing state, said NOx removing means reducing the adsorbed NOx to generate ammonia and retaining the generated ammonia when the exhaust gases are in a reducing state;

reforming means provided upstream of said NOx removing means, for reforming reducing components in the exhaust gases to hydrogen when the exhaust gases are in the reducing state; and

fuel adding means for adding fuel to the exhaust gases which flow into said reforming means.

[2] An exhaust gas purifying apparatus according to claim 1, wherein said reforming means is a reforming catalyst.

[3] An exhaust gas purifying apparatus according to claim 1, wherein said reforming means is a partial oxidation catalyst.

[4] An exhaust gas purifying apparatus according to claim 3, wherein said reforming means contains at least rhodium.

[5] An exhaust gas purifying apparatus according to claim 1, wherein said reforming means is a three-way catalyst.